



**Offshore Drilling Rigs Conference at Singapore on July 27th &
28th, Organized by IBC-Asia**

Recent Updates on India's Drilling Market

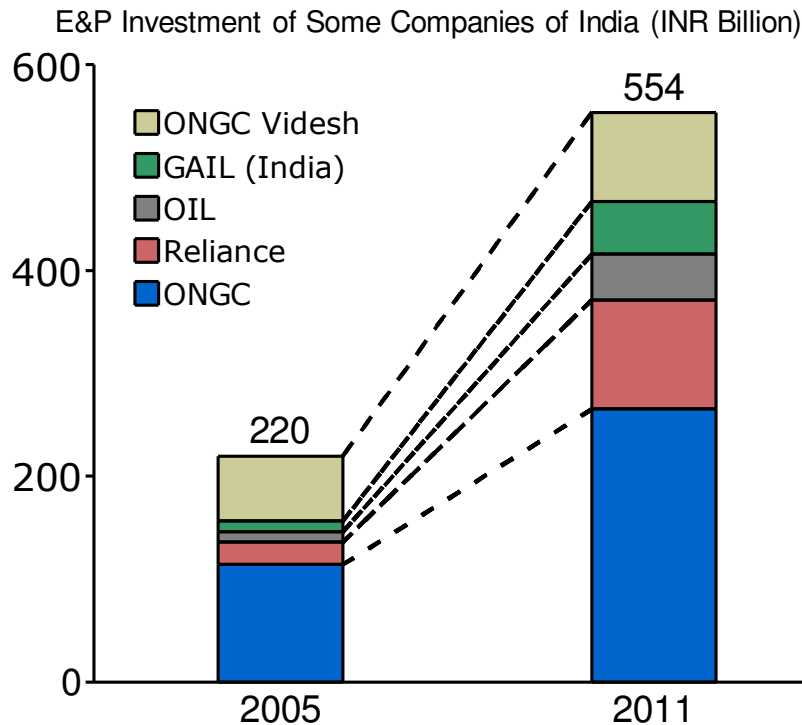
**Anand V Sharma
Mantrana Maritime Advisory Pvt Ltd**

Drivers of Offshore Drilling Industry in India



- Government of India envisions to attain Energy Security by identifying and owning reserves and attaining self sufficiency – Hydrocarbon Vision 2025
- Government Aggressive in offering more blocks to explore in time bound manner
 - ✓ Invited 9 rounds of bidding since formation of New Exploration & Licensing Policy (NELP) for exploration
- Commitment taken from bidders in the form of Minimum Work Program (MWP) to drill a certain number of wells in a specified time
 - ✓ i.e 7 yrs for Shallow water and 8 Yrs for Deepwater Exploration
 - ✓ Failing to achieve it invites penalty and relinquishing of blocks
- Large investment on existing fields to increase production/ increase recovery
 - ✓ Existing fields are depleting at Mumbai Offshore, Gulf of Cambay, Rava

E & P investment by Indian Companies



Source: Mantrana Maritime Advisory
Data: Govt. reports, Company

- ONGC & Reliance - 2 largest operators in Indian E&P
- ONGC Videsh – Operates in Overseas Assets
- OIL & GAIL – Investors with no Operating interest
- Other operators of E&P in India are **CAIRN, GSPC, BG, Niko, ENI, etc** contributing close to INR 40 to 44 billion

Investment Growth

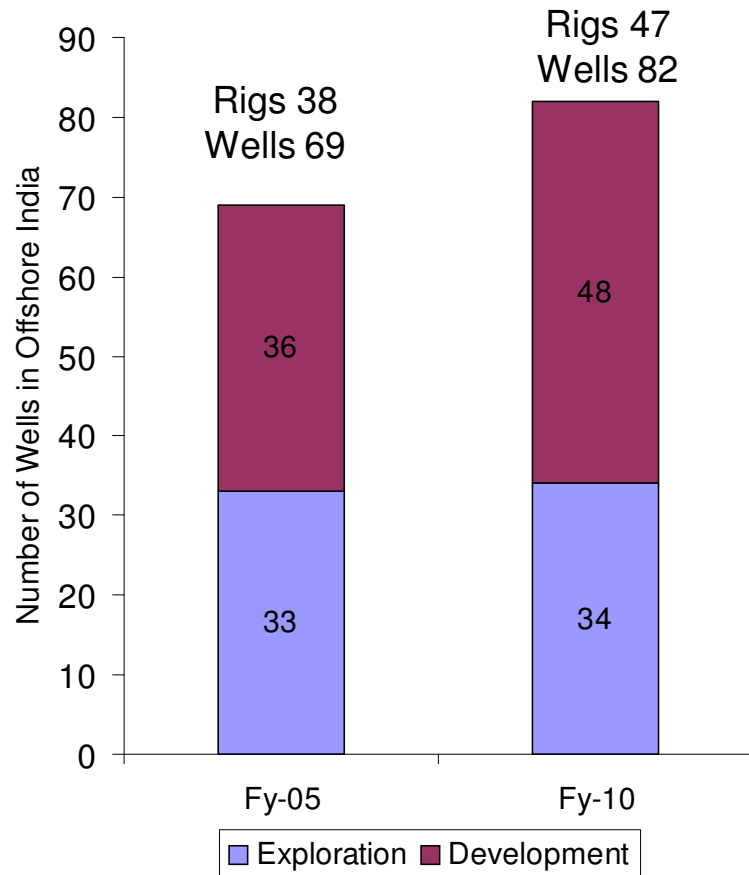
- Investment in last 6 yrs has increased by 2.5 times
- Majority of Investment in Offshore Exploration & Production
- Robust and sustainable investment, irrespective of the ups & downs at global level
- A large share of investment or expenditure by E&P company is earning for Drilling Companies

Major Operators



- ONGC is the largest Exploration & Production company in India with maximum budget
 - ✓ Largest producer of Offshore Oil & Gas in India
 - ✓ Most aggressive in exploration for new blocks and redevelopment of depleting fields
 - ✓ Employs the maximum number of rigs and logistics support for Offshore E&P in India
 - ✓ Hires rigs and vessels on a long term time charter ranging between 3 yrs to 5 yrs
 - ✓ ONGC also awards drilling and construction projects on a turnkey basis, hence service providers have opportunities to find employment with companies serving ONGC
- Reliance Industries would be the 2nd largest E&P company in India
 - ✓ Have discovered one of the largest offshore gas field in East Coast of India
 - ✓ All its blocks are in Deepwaters. All of its drillships chartered from Transocean
- There are dozens of other companies such as CAIRN, GSPC, etc looking for offshore assets such as rigs, vessels etc

Outcome of Investment on the Growth in Offshore Drilling



- Growth of Rigs & Wells drilled in Indian Waters has not been proportional to Investment, due to rise in Charter Rates of Rigs.
- Typical Rates on Long Term Charter in India

Charter Rates (US\$/Day)			
Rig Name	Type	2005	2011
Discover Seven Seas	Drillship	125,000	315,000
C.E. Thornton	Jackup	45,000	135,000

- With increasing in supply of rigs, Charter rates have fallen. This could translate in larger deployment of rigs and drilling of more wells in India

Source: Mantrana Maritime Advisory
Data: Govt. reports, Company Sources



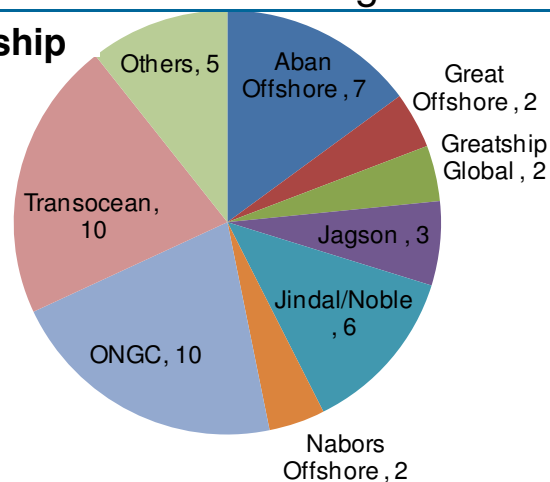
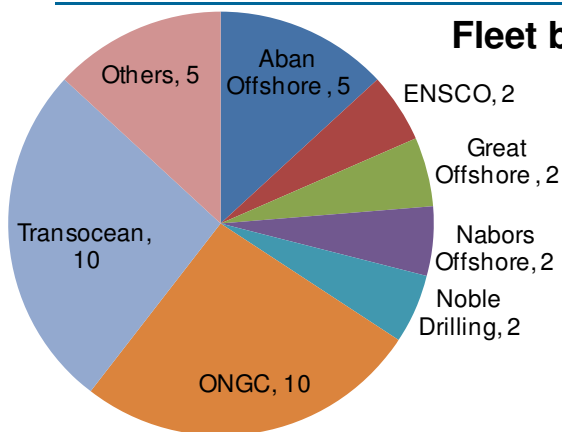
Rig Fleet Growth in India

2005 – Total Rigs 38

2011 – Total Rigs 47

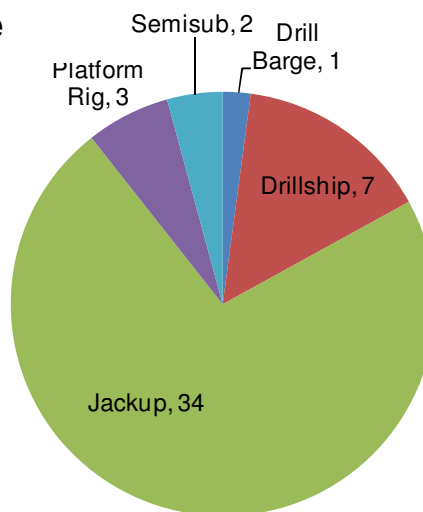
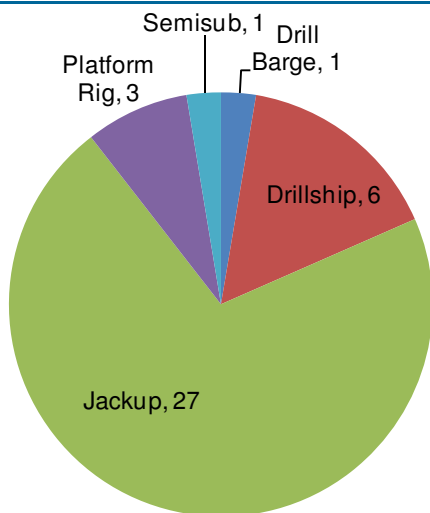
Updates

Fleet by Ownership



- 9 Rig Addition to Fleet
- Loss of Market share by Small Operators in India, such as
- Increase Share of Indian Companies & Foreign Companies with high Indian Penetration

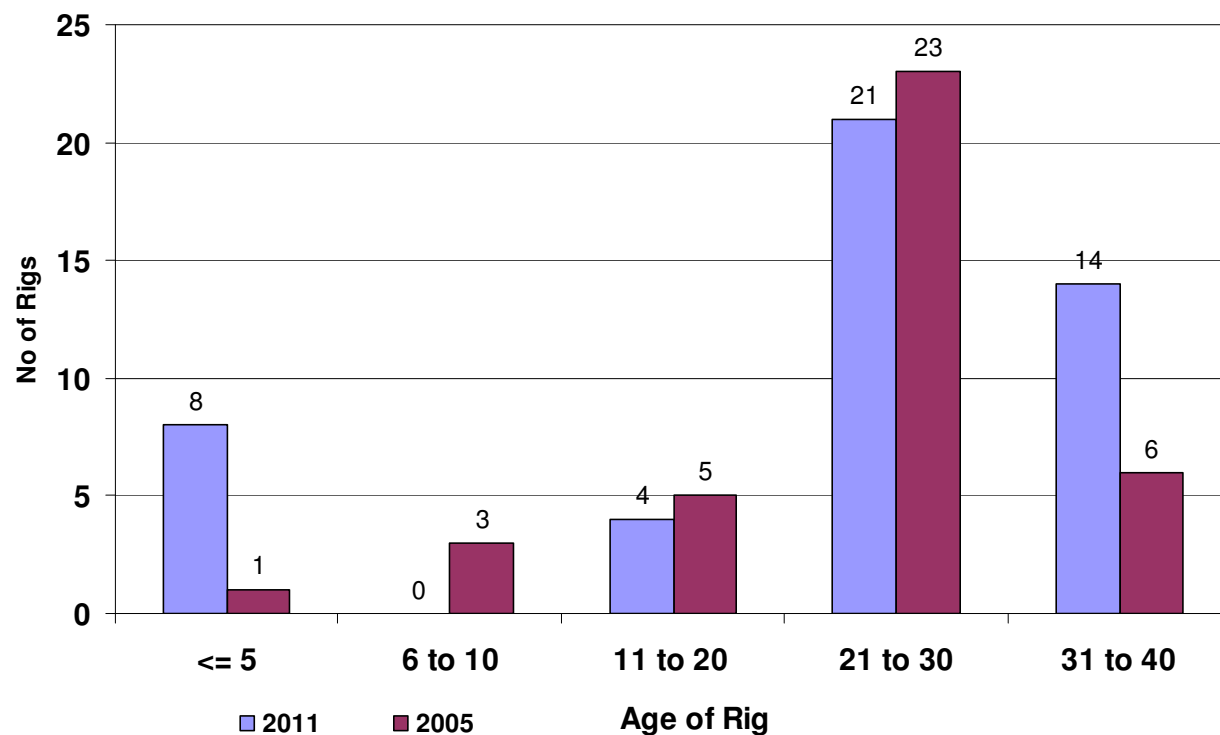
Fleet by Type



- 2 Floaters Added
- 7 Jackup Rigs Added
- Growth primarily due to requirements of ONGC followed by others like Reliance, GSPC, CAIRN



Age Impact on Charter Hire Decision in India



Assumption

Year of upgrade has been considered as the revised year of built

- 7 New built rigs are chartered for long term, apart from renewing/chartering old rigs
- ONGC tendered for newly built harsh environment Jackups
- Reliance / ONGC chartered 2 floaters newly built

In Last 5 Yrs, Indian E&P companies are gradually procuring newer rigs – A good sign for Industry



Typical Qualification Requirements for Offshore Rigs in India

ONGC's typical tender criteria

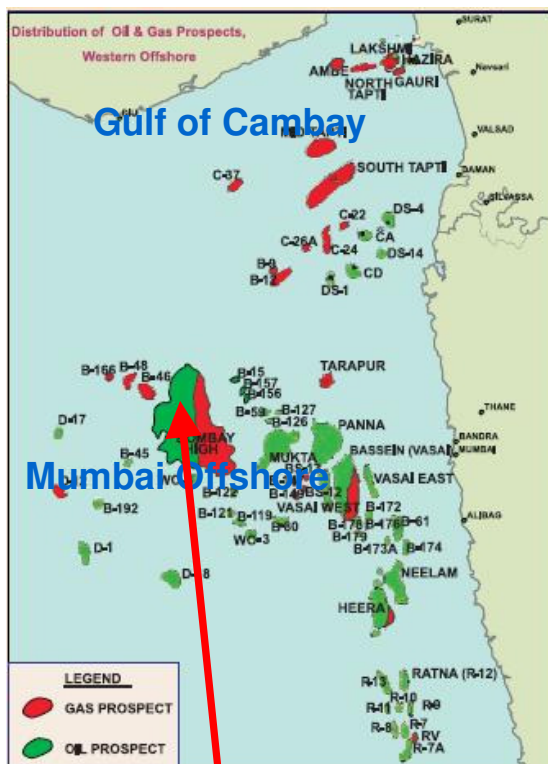
- Minimum 3 years experience of which, 1 yr experience on the type of drilling unit offered
- 5 yrs offshore experience of Rig Manager/Drill Superintendent
- At least 3 yrs experience for other personnel's, of which 1 yr should be on the type of unit being offered
- Certificate of financial capability to execute the contract
- Certificate proving that the tender's net worth is not less than 30% of the contract value

GSPC asks for similar parameters

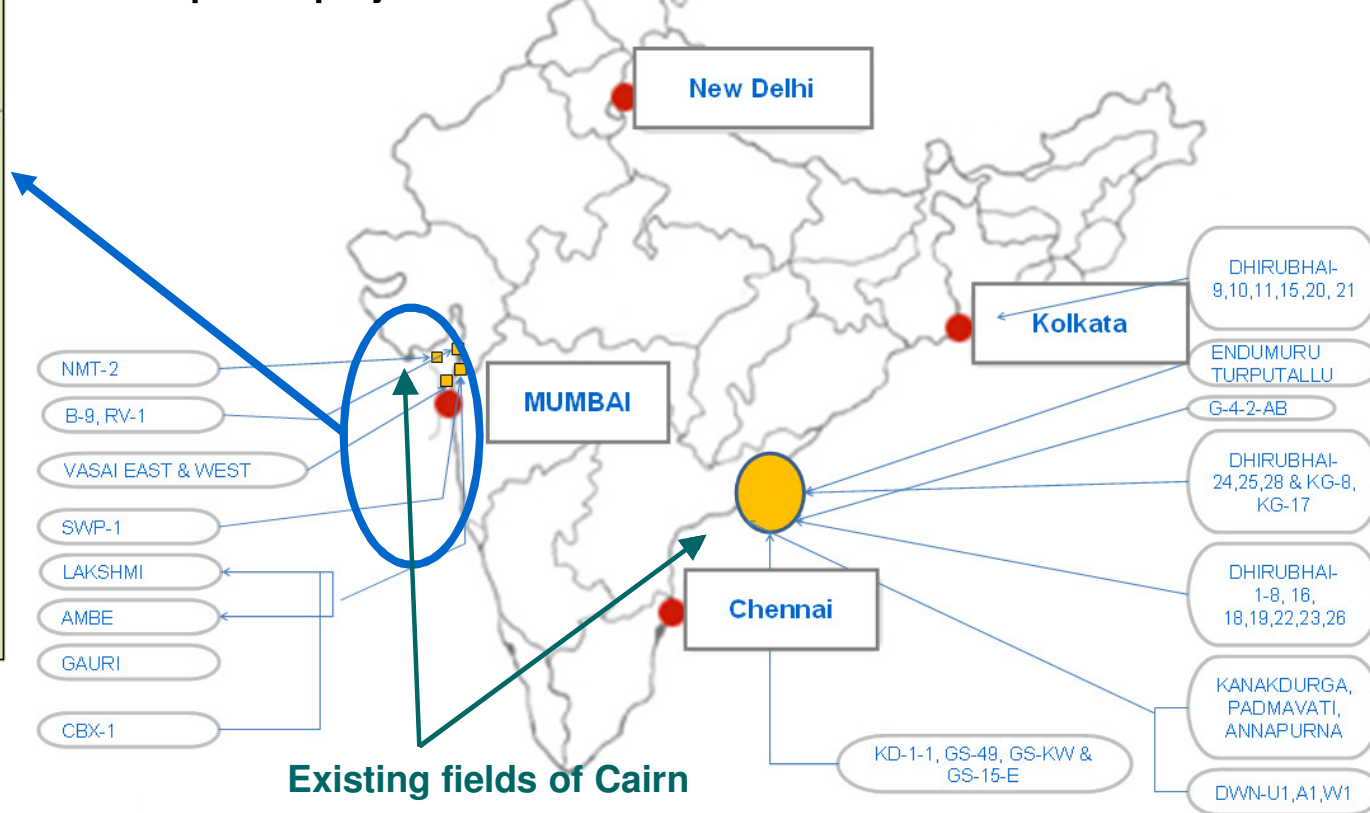
Other private operators look for following broad parameters

- Past record of on time mobilization
- Financial capability to execute projects of that order
- Experience in providing offshore drilling

Opportunities for Drilling at Field Development



Proposed development projects and ongoing redevelopment projects in Offshore Oil & Gas Sector



Redevelopment of Mumbai Offshore by ONGC

Source : DGH

Substantial amount of expenditure of Offshore oil & gas companies is earnings for service providers such as drilling and supply vessels company



Other Opportunities Due to Additional Field Development

- ONGC expanding Mumbai Offshore to develop 3 more cluster aiming to produce 15 cubic meters per day of Gas in 3 to 4 years
- Development Drilling at Deen Dayal Field of GSPC, Target to drill 15 wells to develop by 2014
- New Discovery of Gas announced by Reliance, ONGC and Hardy in the year 2011 in KG basin, being validated by regulator
- Regulator DGH asked Reliance to drill more wells to arrest declining output
- ONGC is planning an Investment of close to US\$ 7.7 billion for redevelopment of existing field and exploration

All these Developments to translate into opportunities for Drilling Companies



Contract Expiry of Existing Contracts

Type of Rigs	Contractor	Tentative Contract Expiry Time										Contract Expiry	Total Fleet - Company
		H1-11	H2-11	H1-12	H2-12	H1-13	H2-13	H1-14	H2-14	H1-15	H2-15		
Jackup													
	ONGC	2	3	2		4	3	5	1	3		23	31
	Reliance											0	0
	CAIRN				1							1	1
	GSPC				1							1	1
Total Jackup		2	3	2	2	4	3	5	1	3		25	33
Floaters													
	ONGC		2			1					1	4	6
	Reliance		1						1	1		3	3
	GSPC				1							1	1
Total Floaters		0	3	0	1	1	0	0	1	1	1	8	10
Other Rigs with ONGC													4
Total Rigs In India		2	6	2	3	5	3	5	2	4	1	33	47



Bidding Stage

- India's E&P activity could be divided into Pre- NELP & NELP
- Pre-NELP is mostly from National Oil Company's
- There is procedural differences mostly related to taxes
- A rig/marine asset chartered for Pre-NELP region cannot be deployed for NELP region & Vice-versa
- Bidders should identify the requirement for rig for a block & Carefully prepare its deployment procedure for
 - ✓ Mostly Duty associated with supply of equipment & material to be used for Drilling in both Pre-NELP and NELP blocks are different
- Failing to do correct paper work could attract huge penalty



Conclusion

- India Offers sustainable Opportunity for Offshore Drilling Companies in Exploration
- Large opportunity is generated due to redevelopment of depleting field & Development of New Field
- Policy framework developed by Independent Regulator, DGH (Directorate General of Hydrocarbons) E&P activity ongoing irrespective of oil prices or other ups and downs of business
- There is a gradual shift for Charter of newer assets for E&P
- ONGC is the leader, Charters maximum assets on long term. Hence, provides most lucrative opportunity for Drilling Company
- Commercial benefits of working in India is at par with International Standards



About Mantrana

- Undertakes research & consultancy on the Indian Maritime Sector
- Undertakes economic advisory on the following maritime segments
 - √ Offshore Drilling & Logistics Sector
 - √ Shipbuilding
 - √ Shipping
 - √ Ports & Logistics

- Following are key services provided by Mantrana Team
 - √ Market Study
 - √ Project Feasibility Study
 - √ Business Plan
 - √ Bid Advisory
 - √ Due Diligence for investment



Thank You for Attention
